Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL QUALITY MEASURES CLEARINGHOUSE

General

Title

Statin therapy for patients with diabetes: percentage of members 40 to 75 years of age during the measurement year with diabetes who do not have ASCVD who were dispensed at least one statin medication of any intensity.

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of members 40 to 75 years of age with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) who were dispensed at least one statin medication of any intensity during the measurement year.

See the related National Quality Measures Clearinghouse (NQMC) summary of the National Committee for Quality Assurance (NCQA) measure Statin therapy for patients with diabetes: percentage of members 40 to 75 years of age during the measurement year with diabetes who do not have ASCVD who remained on a statin medication of any intensity for at least 80% of the treatment period.

Rationale

Diabetes is a complex group of diseases marked by high blood sugar due to the body's inability to make or use insulin. Diabetes can lead to serious complications (Centers for Disease Control and Prevention [CDC], 2014) Twenty-nine million (9.3 percent) of Americans had diabetes in 2012 and 1.7 million adults were newly diagnosed with diabetes (American Diabetes Association [ADA], 2014). Patients with diabetes have elevated cardiovascular risk, thought to be due in part to elevations in unhealthy cholesterol levels. Having unhealthy cholesterol levels places patients at a significant risk for developing atherosclerotic cardiovascular disease (ASCVD) (ADA, 2015).

Primary prevention for cardiovascular disease is an important aspect of diabetes management. The risk of an adult with diabetes developing cardiovascular disease is two to four times higher than that of an adult without diabetes (American Heart Association [AHA], 2012). In addition to being at a higher risk for developing cardiovascular disease, patients with diabetes tend to have worse survival after the onset of cardiovascular disease (Stone et al., 2014). The CDC estimates that adults with diabetes are 1.7 times more likely to die from cardiovascular disease than adults without diabetes (CDC, 2014).

Numerous studies have demonstrated the efficacy of statins in reducing cardiovascular risk. The use of statins for primary prevention of cardiovascular disease in patients with diabetes, based on their age and other risk factors, is recommended by guidelines from the ADA (2015) and the American College of Cardiology/American Heart Association (ACC/AHA) (Stone et al., 2014).

Statins (3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitors) are a class of drugs that decrease low-density lipoprotein cholesterol (LDL-C) levels. Statins can decrease LDL-C levels by as much as 50% and could have additional benefit on high-density lipoprotein cholesterol (HDL-C) and triglyceride levels (Spratt, 2009). The amount of cholesterol lowering effect is based on statin intensity, which is classified as either high, moderate or low intensity.

Cholesterol lowering medications, such as statins, are among the most commonly prescribed drugs in America, accumulating $17 billion in sales in 2012. In the United States, 22 percent of adults (45 and older) take statins (CDC, 2014). Evidence shows statin use decreases cardiovascular mortality in patients with established cardiovascular disease, and total mortality rates. Primary and secondary prevention trial data strongly support starting lipid-lowering therapy with a statin in most patients with type 2 diabetes (Spratt, 2009).

In a systematic review and meta-analysis of 12 studies conducted to evaluate the clinical benefit of lipid-lowering drug treatment in primary and secondary prevention, researchers found statins were equally effective in patients with and without diabetes (Costa et al., 2006). However, after adjusting for baseline risk, patients with diabetes had greater benefit in both the primary and secondary prevention of death due to coronary artery disease, nonfatal myocardial infarction, revascularization and stroke. Another meta-analysis by the American College of Physicians on lipid-lowering therapy for type 2 diabetes patients found a 22 percent reduction of cardiovascular events with primary prevention and a 24 percent reduction for secondary prevention (Spratt, 2009).

The total cost of diabetes care in the United States was $245 billion in 2012—a 41 percent increase from $175 billion in 2007. The cost of care to treat patients with diabetes includes direct costs ($176 billion) from office visits, hospital care and medications. Indirect costs to treat patients with diabetes are estimated to be $69 billion and includes costs for absenteeism, reduced productivity, unemployment due to disability and loss of productivity due to premature mortality. Research also shows that more than 1 in 10 dollars spent on health care in the United States are spent on the care of patients with diabetes and its complications (ADA, 2013).

Guideline recommendations: ACC/AHA. For men and women 40 to 75 years of age with a diagnosis of diabetes, moderate-intensity statin therapy is recommended. For men and women age 40 to 75 years of age with diabetes and an estimated 10-year ASCVD risk, high-intensity statin therapy should be used unless contraindicated. For men and women under 40 years of age or over 75 years of age with a diagnosis of diabetes, it is reasonable to initiate or continue statin therapy for those who are tolerating

it, provided that benefits, potential risks, drug interactions and patient preferences are taken into consideration (Stone et al., 2014).

ADA. For men and women 40 to 75 years of age with a diagnosis of diabetes but without any cardiovascular disease (CVD) risk factors, consider using moderate-intensity stain and lifestyle therapy. For men and women of all ages with a diagnosis of diabetes and CVD risk factors, moderate or high-intensity statin therapy is recommended (2015).

Evidence for Rationale

American Diabetes Association (ADA). Standards of medical care in diabetes-2015: cardiovascular disease and risk management. Diabetes Care. 2015 Jan;38 Suppl:S49-57. PubMed

American Diabetes Association (ADA). Statistics about diabetes. [internet]. Alexandria (VA): American Diabetes Association (ADA); 2014 [accessed 2015 Jan 20].

American Diabetes Association. Economic costs of diabetes in the U.S. in 2012. Diabetes Care. 2013 Apr;36(4):1033-46.

American Heart Association (AHA). Cardiovascular disease & diabetes. [internet]. Dallas (TX): American Heart Association (AHA); 2012 Jul 5 [accessed 2016 Jan 20].

Centers for Disease Control and Prevention (CDC). National diabetes statistics report: estimates of diabetes and its burden in the United States, 2014. Atlanta (GA): U.S. Department of Health and Human Services (DHHS), Centers for Disease Control and Prevention (CDC); 2014.

Costa J, Borges M, David C, Vaz Carneiro A. Efficacy of lipid lowering drug treatment for diabetic and non-diabetic patients: meta-analysis of randomised controlled trials. BMJ. 2006 May 13;332(7550):1115-24. [50 references] PubMed

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

Spratt KA. Managing diabetic dyslipidemia: aggressive approach. J Am Osteopath Assoc. 2009 May;109(5 Suppl):S2-7. PubMed

Stone NJ, Robinson JG, Lichtenstein AH, Bairey Merz CN, Blum CB, Eckel RH, Goldberg AC, Gordon D, Levy D, Lloyd-Jones DM, McBride P, Schwartz JS, Shero ST, Smith SC Jr, Watson K, Wilson PW. 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol. 2014 Jul 1;63(25 Pt B):2889-934. [144 references] PubMed

Primary Health Components

Diabetes; statin therapy

Denominator Description

Members 40 to 75 years of age as of December 31 of the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

The number of members who had at least one dispensing event for a statin medication of any intensity during the measurement year (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA's) Committee on Performance Measurement and Board of Directors. Where applicable, measures also are assessed for construct validity using the Pearson correlation test. All measures undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis.

Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Mar 16. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Hospital Inpatient

Hospital Outpatient

Managed Care Plans

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age 40 to 75 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality

Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

The measurement year and the year prior to the measurement year

Denominator Sampling Frame

Enrollees or beneficiaries

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Institutionalization

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
Members 40 to 75 years of age as of December 31 of the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD)

There are two ways to identify members with diabetes: by claim/encounter data and by pharmacy data. The organization must use both methods to identify the eligible population, but a member only needs to be identified by one method to be included in the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.

Claim/Encounter Data. Members who met any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years):

At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), emergency department (ED) visits (ED Value Set) or non-acute inpatient encounters

(Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two visits.

At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

Pharmacy Data. Members who were dispensed insulin or hypoglycemics/anti-hyperglycemics on an ambulatory basis during the measurement year or the year prior to the measurement year (refer to table CDC-A in the original measure documentation for a list of prescriptions to identify members with diabetes).

Note:

The member must be continuously enrolled for the measurement year and the year prior to the measurement year.
Allowable Gap: No more than one gap in enrollment of up to 45 days during each year of continuous enrollment. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage.

Exclusions

Exclude members who meet any of the following criteria:

Members with cardiovascular disease are identified in two ways: by event or by diagnosis. The organization must use both methods to identify this population, but a member only needs to be identified by one method to be excluded from the measure.

Event. Any of the following during the year prior to the measurement year meet criteria:

Myocardial infarction (MI). Discharged from an inpatient setting with an MI (MI Value Set). To identify discharges:

Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).

Identify the discharge date for the stay.

Coronary artery bypass graft (CABG). Members who had CABG (CABG Value Set) in any setting.

Percutaneous coronary intervention (PCI). Members who had PCI (PCI Value Set) in any setting.

Other revascularization. Members who had any other revascularization procedure (Other Revascularization Value Set) in any setting.

Diagnosis. Identify members as having ischemic vascular disease (IVD) who met at least one of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.

At least one outpatient visit (Outpatient Value Set) with an IVD diagnosis (IVD Value Set), *or*

At least one acute inpatient encounter (Acute Inpatient Value Set) with an IVD diagnosis (IVD Value Set).

Pregnancy (Pregnancy Value Set) during the measurement year or year prior to the measurement year.

In vitro fertilization (IVF Value Set) in the measurement year or year prior to the measurement year.

Dispensed at least one prescription for clomiphene (refer to the original measure documentation Table SPC-A for a list of medications to identify exclusions) during the measurement year or the year prior to the measurement year.

End-stage renal disease (ESRD) (ESRD Value Set) during the measurement year or the year prior to the measurement year.

Cirrhosis (Cirrhosis Value Set) during the measurement year or the year prior to the measurement year.

Myalgia, myositis, myopathy, or rhabdomyolysis (Muscular Pain and Disease Value Set) during the measurement year.

Members who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or the year prior to the measurement year *and* who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year. (*Optional*)

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the NCQA Web site to purchase HEDIS Volume 2, which includes the Value Set Directory.

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
The number of members who had at least one dispensing event for a statin medication of any intensity during the measurement year. Refer to Table SPD-A in the original measure documentation for a list of high-, moderate- and low-intensity statin prescriptions.

Exclusions
Unspecified

Value Set Information
Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the NCQA Web site to purchase HEDIS Volume 2, which includes the Value Set Directory.

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Pharmacy data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

This measure requires that separate rates be reported for commercial, Medicaid, and Medicare product lines.

Standard of Comparison

not defined yet

Identifying Information

Original Title

Statin therapy for patients with diabetes (SPD): received statin therapy.

Measure Collection Name

HEDIS 2016: Health Plan Collection

Measure Set Name

Effectiveness of Care

Measure Subset Name

Diabetes

Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Oct

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

Measure Availability

Source available for purchase from the National Committee for Quality Measurement (NCQA) Web site .

For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org .

Companion Documents

The following is available:

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical update. Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct 1. 12 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC Status

This NQMC summary was completed by ECRI Institute January 18, 2016.

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Production

Source(s)

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